

CLAIMS

1. A wound dressing comprising:
a solid substrate; and
5 a formulation of protonated/acidified nucleic acids.
2. The wound dressing of claim 1, wherein the formulation of protonated/acidified nucleic acid is from about 0.1 to about 5 percent of the dressing dry weight.
- 10 3. The wound dressing of claim 1, wherein the formulation of protonated/acidified nucleic acids is a coating on said substrate.
4. The wound dressing of claim 1, wherein the formulation of protonated/acidified nucleic acid is interspersed in the solid substrate.
- 15 5. The wound dressing of claim 3, further comprising a polymeric film bonded to one side of said coated solid substrate.
6. The wound dressing of claim 1, wherein said polymeric film has a thickness of about 0.001
20 inch +/- about 0.0005 inch.
7. The wound dressing of claim 1, wherein the solid substrate comprises a polyester mesh netting formed of woven multifilament polyester.
- 25 8. A suture comprising:
a pliable solid substrate; and
a formulation of an effective amount of protonated/acidified nucleic acids.

9. The suture of claim 8, wherein the formulation of protonated/acidified nucleic acid is from about 0.1 to about 5 percent of the dry weight of the suture.

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10. The suture of claim 8, wherein the solid substrate is comprised of synthetic materials

11. The suture of claim 10 wherein the solid substrate is a polyester.

12. The suture of claim 8 wherein the suture is a nonabsorbable suture.

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13. An adhesive composition having antibiotic properties for skin contact applications comprising:

an adhesive polymer; and

an effective amount of protonated/acidified nucleic acid dispersed throughout said polymer.

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14. The adhesive composition of claim 13, wherein said adhesive polymer comprises a mixture of a low molecular weight solid acrylic polymer and a medium molecular weight solid acrylic polymer.

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15. The adhesive composition of claim 13, further comprising an effective amount of a tackifier.

16. The adhesive composition of claim 13, wherein the concentration of protonated/acidified nucleic acids in said polymer composition is about 0.1% to about 2% by weight.

17. A surgical drape comprising:
a sheet of polymeric substrate;
a coating of an adhesive composition of claim 15.

5 18. The surgical drape of claim 17, wherein said substrate comprises a sheet of a polyester.

19. A wound sealant comprising:
a fibrinogen activator in a concentration sufficient to initiate clot formation; and
an effective amount of protonated/acidified nucleic acids.

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20. The wound sealant of claim 19, wherein the fibrinogen activator is selected from the group consisting of thrombin and batroxobin.

21. The wound sealant of claim 19 further comprising fibrinogen.

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22. The adhesive composition of claim 19, wherein the concentration of protonated/acidified nucleic acids in said wound sealant is about 0.1% to about 10% by weight.

23. A skin substitute comprising:
20 a flexible support surface; and
an effective amount of protonated/acidified nucleic acid.

24. The skin substitute of claim 23, wherein the protonated/acidified nucleic acid is impregnated into the support surface.

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25. The skin substitute of claim 24, wherein the protonated/acidified nucleic acid is coated onto the support surface.

26. The skin substitute of claim 24, wherein the concentration of protonated/acidified nucleic acids in said skin substitute is about 0.1% to about 2% by weight.

27. A method of treatment, comprising:
5 covering a wound with the wound dressing of claim 1.

28. A method of treatment, comprising:
closing a wound with the suture of claim 8.

10 29. A method of treatment comprising:
covering a wound with the surgical drape of claim 17.

30. A method of treatment, comprising:
closing a wound with the wound sealant of claim 19.

15 31. A method of treatment, comprising:
covering a wound with the skin substitute of claim 23.